Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (cancelled)

Claim 2 (currently amended): A method in accordance with claim ~~1,~~ ~~characterized in that~~ 26 wherein the measuring channel and the additional channel are operated ~~jointly, and in particular~~ at least substantially simultaneously [[,]] for each object distance ~~(D)~~.

Claim 3 (cancelled)

Claim 4 (currently amended): A method in accordance with claim ~~1,~~ ~~characterized in that~~ 26 wherein the received signals of both the measuring channel and of the additional channel are used to determine a distance value serving as the measure for the object distance ~~(D)~~.

Claim 5 (currently amended): A method in accordance with claim ~~1,~~ ~~characterized in that in~~ 26 wherein in at least one of the measuring channel and~~/or~~ in the additional channel the respective intensity distribution of the received signal on the reception unit ~~(E) or on the reception units (E1, E2)~~ is used for ~~the determination of~~ determining the distance.

Claim 6 (currently amended): A method in accordance with claim 5 [[,]] ~~characterized in that~~ wherein one of the position of a center of the intensity distribution ~~or~~ and of a characteristic region of the intensity distribution is used in at least one of the measuring channel and~~/or in~~ the additional channel for ~~the determination of~~ determining the distance.

Claim 7 (currently amended): A method in accordance with claim ~~1,~~ ~~characterized in that~~ 27 including providing a separate transmission unit ~~(S1, S2), and preferably a joint reception unit (E), is respectively used~~ for each of the measuring channel and the additional channel.

Claim 8 (currently amended): A method in accordance with claim 7 [[,]] ~~characterized in that~~ including emitting the sensing rays of the measuring channel and of the additional channel ~~are emitted~~ in different directions.

Claim 9 (currently amended): A method in accordance with claim 8 [[,]] ~~characterized in that~~ wherein, when mutually corresponding characteristic regions of the received signals of the measuring channel and of the additional channel are jointly evaluated, an investigation is being made in each case whether they are ~~in particular~~ mutually displaced by an expected amount ~~(a + ΔX)~~.

Claim 10 (currently amended): A method in accordance with claim 7 [[,]] ~~characterized in that~~ including focusing the sensing rays of the measuring channel and of the additional channel ~~are focused~~ at different distances ~~(d1, d2), with the focus preferably being at a near range in one channel and at a far range in the other channel~~.

Claim 11 (currently amended): A method in accordance with claim 10 [[,]] ~~characterized in that~~ wherein, when mutually corresponding regions of the received signals of the measuring channel and of the additional channel are jointly evaluated, an investigation is being made in each case whether the emitted sensing rays are imaged with different degrees of sharpness~~, in particular with a sharpness differing in accordance with an expected amount~~.

Claim 12 (currently amended): A method in accordance with claim ~~1,~~ ~~characterized in that~~ 27 including focusing the sensing rays of both the measuring channel and the additional channel ~~are focused~~.

Claim 13 (cancelled)

Claim 14 (currently amended): A method in accordance with claim ~~13,~~ ~~characterized in that a difference is formed~~ 26 wherein jointly evaluating comprises forming a difference between the received signals of the measuring channel and of the additional channel ~~on the joint evaluation hereof~~.

Claim 15 (currently amended): A method in accordance with claim ~~13,~~ ~~characterized in that, on the joint evaluation,~~ 26 wherein jointly evaluating comprises deducting the received signal of the additional channel ~~is deducted~~ from the received signal of the measuring channel, ~~in that~~ setting negative difference values ~~are set to~~ resulting from the deduction at zero, and ~~in that a resulting~~ using positive difference signals resulting from deducting for determining the object ~~is used for the determination of the~~ distance.

Claim 16 (currently amended): A method in accordance with claim ~~13,~~ ~~characterized in that the~~ 26 including selecting an intensity of the sensing rays ~~are selected~~ such that the received signal is larger in the additional channel than in the measuring channel in a characteristic region which is caused by an interfering object ~~(15) with~~ having one of a high reflection and~~/or~~ remittance capability in comparison ~~with~~ to the sensed object ~~(13)~~.

Claims 17-25 (cancelled)

Claim 26 (new): A method for the determination of an object distance between an opto-electronic sensor working according to the principle of triangulation and a sensed object, comprising

providing the sensor with at least one measuring channel between a transmission unit for emitting first electromagnetic sensing rays into the measuring region and a reception unit for detecting sensing rays coming from the measuring region;

providing the sensor with at least one additional channel which has at least one of a further transmission unit for transmitting second electromagnetic sensing rays into the measuring region and a further reception unit;

expanding the second sensing rays and directing the expanded second sensing rays onto the measuring region to form an expanded sensing zone; and

jointly evaluating the received signals of the measuring channel and of the additional channel in order to determine the object distance.

Claim 27 (new): A method for the determination of an object distance between an opto-electronic sensor working according to the principle of triangulation and a sensed object,

comprising

providing the sensor with at least one measuring channel between a transmission unit for emitting first electromagnetic sensing rays into the measuring region and a reception unit for detecting sensing rays coming from the measuring region;

providing the sensor with at least one additional channel which has at least one of a further transmission unit for transmitting second electromagnetic sensing rays into the measuring region and a further reception unit for receiving signals;

evaluating the received signals of at least one of the measuring channel and the additional channel to determine a distance value for the object distance;

determining from the signals received by the further reception unit whether the signals fulfill at least one additional criterion; and

using the distance value as the measure of the object distance if the additional criterion is fulfilled.

Claim 28 (new): A method for the determination of an object distance between an opto-electronic sensor working according to the principle of triangulation and a sensed object, comprising

providing the sensor with at least first and second measuring channels and a transmission unit emitting electromagnetic sensing rays into a measuring region, each channel including one of a reception unit and an optical reception system for detecting sensing rays coming from the measuring region; and

arranging the transmission unit between the at least one of the reception unit and the optical reception system, and

jointly evaluating the received signals of the first and second channels to determine the object distance by

respectively determining for the received signals a center of an intensity distribution of the detected sensing rays coming from the measuring region and a distance of the center from a position of the transmission unit, and

using a mean value of the center distances as a measure for the object distance.

Claim 29 (new): A method for the determination of an object distance between an opto-electronic sensor working according to the principle of triangulation and a sensed object, comprising

providing the sensor with at least first and second measuring channels and a transmission unit emitting electromagnetic sensing rays into the measuring region, each channel including one of a reception unit and an optical reception system for detecting sensing rays coming from the measuring region;

arranging the at least one of the reception units and the optical reception system at the same side of the transmission unit; and

jointly evaluating the received signals of the first and second channels to determine the object distance by

respectively determining for the received signals a center of an intensity distribution of the detected sensing rays coming from the measuring region and a distance of the center from a position of the transmission unit, and

using a distance between mutually corresponding characteristic regions of the received signals of the first and second channels as a measure for the object distance.

Claim 30 (new): Apparatus for the determination of an object distance between an opto-electronic sensor working according to the principle of triangulation and a sensed object, comprising

at least one measuring channel between a transmission unit for emitting first electromagnetic sensing rays into a measuring region and a reception unit for detecting sensing rays coming from the measuring region;

at least one additional channel which has at least one of a further transmission unit for transmitting second electromagnetic sensing rays into the measuring region and a further reception unit;

a device expanding the second sensing rays and directing the expanded second sensing rays onto the measuring region to form an expanded sensing zone; and

a processor which jointly evaluates the received signals of the measuring channel and of the additional channel in order to determine the object distance.

Claim 31 (new): A method in accordance with claim 27 wherein the measuring channel and the additional channel are operated at least substantially simultaneously for each object distance.

Claim 32 (new): A method in accordance with claim 27 wherein the received signals of both the measuring channel and of the additional channel are used to determine a distance value serving as the measure for the object distance.

Claim 33 (new): A method in accordance with claim 27 wherein in at least one of the measuring channel and in the additional channel the respective intensity distribution of the received signal on the reception unit is used for determining the distance.

Claim 34 (new): A method in accordance with claim 26 wherein expanding comprises expanding the second sensing rays in at least one of an unfocused, scattered, expanded and diffused manner.

Claim 35 (new): A method according to claim 26 wherein the sensing zone covers at least a substantial part of a half-space of the sensor on the sensed object side.

Claim 36 (new): Apparatus for the determination of an object distance between an opto-electronic sensor working according to the principle of triangulation and a sensed object, comprising

at least one measuring channel between a transmission unit for emitting first electromagnetic sensing rays into the measuring region and a reception unit for detecting sensing rays coming from the measuring region;

at least one additional channel which has at least one of a further transmission unit for transmitting second electromagnetic sensing rays into the measuring region and a further reception unit for receiving signals;

a device evaluating the received signals of at least one of the measuring channel and the additional channel to determine a distance value for the object distance;

a further device determining from the signals received by the further reception unit whether the signals fulfill at least one additional criterion; and

a processor for using the distance value as the measure of the object distance if the additional criterion is fulfilled.